Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

Listing of Claims

1.   (**Currently Amended**) A method, comprising:

establishing a connection between a server and a synchronization client associated with a handheld device, the server having access to a first database and the handheld device having access to a second database, the handheld device comprising an application configured to allow user write access to the second database, wherein the synchronization client is configured to use the connection in an operation to synchronize the second database and the first database;

receiving, from the server, ~~second~~ first information indicative of a version of the application;

sending, to the server, information of transactions performed on the second database;

comparing the ~~second~~ first information with information stored on the handheld device that is indicative of a version of the application on the handheld device;

updating the application on the handheld device using metadata received from the server if the ~~second~~ first information does not compare equally with the information that is indicative of the version of the application on the handheld device, wherein the metadata comprises application definitions;

receiving, from the server, data to update the second data base.

2.   (**Currently Amended**) The method of claim 1, further comprising the acts of receiving, from the server, ~~first~~ second information indicative of a structure of the first database and determining whether the structure of the first database has been updated since a previous synchronization operation.

3. **(Currently Amended)** The method of claim 2, wherein determining whether the structure of the first database has been updated since the previous synchronization operation, comprises:

> comparing the ~~first~~ second information with information stored on the handheld device that is indicative of the structure of the first database when the previous synchronization operation was performed.

4. (Previously Presented) The method of claim 2, further comprising:

> sending, to the server, filter information;
>
> filtering data based on the filter information; and
>
> receiving, from the server, the filtered data;
>
> wherein receiving, from the server, the filtered data comprises:
>
> receiving, from the server, a first set of data extracted from the first database when the structure of the first database has been updated since the previous synchronization operation, the first set of data including data that has not changed in the second database since the previous synchronization operation was performed.

5. (Previously Presented) The method of claim 2, further comprising:

> sending, to the server, filter information;
>
> filtering data based on the filter information; and
>
> receiving, from the server, the filtered data;
>
> wherein receiving, from the server, the filtered data comprises:
>
> receiving, from the server, a second set of data extracted from the first database when the structure of the first database has not been updated since the previous synchronization operation, the second set of data not including data that has not changed in the second database since the previous synchronization operation was performed.

6. (Previously Presented) The method of claim 1, further comprising determining whether the application has been updated since a previous synchronization operation.

7. (Cancelled)

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8.   (Original) The method of claim 1, wherein sending, to the server, information of transactions performed on the second database, comprises:

　　receiving, from the server, an identifier of information of a last transaction received by the server; and

　　sending, to the server, transaction information that includes an identifier for each transaction made after the last transaction received by the server.

9.   (Original) The method of claim 8, wherein sending to the server information of transactions performed on the second database, further comprises:

　　receiving, from the server, error information when the server detects a transaction error;

　　providing an indication of the error information to a user; and

　　receiving input from the user to process the transaction error.

10.   (Cancelled)

11.   (Currently Amended) An system, comprising:

　　means for establishing a connection between a server and a synchronization client associated with a handheld device, the server having access to a first database and the handheld device having access to a second database, the handheld device comprising an application to allow user access to the second database, wherein the synchronization client is configured to use the connection in an operation to synchronize the second database and the first database;

　　means for receiving, from the server, ~~second~~ first information indicative of a version of the application from the server;

　　means for comparing the ~~second~~ first information with information stored on the handheld device that is indicative of a version of the application on the handheld device;

　　means for updating the application on the handheld device using metadata received from the server if the ~~second~~ first information does not compare equally with the information that is indicative of the version of the application on the handheld device, wherein the metadata comprises application definitions;

　　means for sending, to the server, information of transactions performed on the second database by the user via the handheld device.

12.   (Previously Presented) The system of claim 11, further comprising:

    means for receiving, from the server, first information indicative of a structure of the first
        database;

    means for determining whether the structure of the first database has been updated since
        a previous synchronization operation.

13.   (Previously Presented) The system of claim 12, wherein the means for determining
whether the structure of the first database has been updated since the previous synchronization
operation, comprises:

    means for comparing the first information with information stored on the handheld device
        that is indicative of the structure of the first database when the previous
        synchronization operation was performed.

14.   (Previously Presented) The system of claim 12, further comprising:

    means for sending, to the server, user-specific filter information;

    means for identifying, in the first database, data visible to the user of the synchronization
        client;

    means for filtering the identified data based on the user-specific filter information; and

    means for receiving, from the server, the filtered data;

    wherein the means for receiving, from the server, the filtered data, comprises:

    means for receiving, from the server, a first set of data extracted from the first database
        when the structure of the first database has been updated since a previous
        synchronization operation, the first set of data including data that has not changed
        in the second database since the previous synchronization operation was
        performed.

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15.   (Previously Presented) The system of claim 12, further comprising:

means for sending, to the server, user-specific filter information;

means for identifying, in the first database, data visible to the user of the synchronization client;

means for filtering the identified data based on the user-specific filter information; and

means for receiving, from the server, the filtered data;

wherein the means for receiving, from the server, the filtered data, comprises:

means for receiving, from the server, a second set of data extracted from the first database when the structure of the first database has not been updated since the previous synchronization operation, the second set of data not including data that has not changed in the second database since the previous synchronization operation was performed.

16.   (Previously Presented) The system of claim 11, further comprising means for determining whether the application has been updated since a previous synchronization operation.

17.   (Cancelled)

18.   (Original) The system of claim 11, wherein the means for sending to the server information of transactions performed on the second database, comprises:

means for receiving, from the server, an identifier of information of a last transaction received by the server; and

means for sending, to the server, transaction information that includes an identifier for each transaction made after the last transaction received by the server.

19.   (Original) The system of claim 18, wherein the means for sending to the server information of transactions performed on the second database, further comprises:

means for receiving, from the server, error information when the server detects a transaction error;

means for providing an indication of the error information to a user; and

means for receiving input from the user to process the transaction error.

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20.   (Cancelled)

21.   **(Currently Amended)** A machine-readable medium having stored thereon a plurality of instructions that when executed by a handheld device cause the handheld device to perform operations comprising:

establishing a connection between a server and a synchronization client, the

synchronization client associated with the handheld device, the server having

access to a first database and the handheld device having access to a second

database, the handheld device comprising an application configured to allow user

access to the second database, wherein the synchronization client is configured to

use the connection in an operation to synchronize the second database and the

first database;

receiving, from the server, ~~second~~ first information indicative of a version of the

application;

sending, to the server, information of transactions performed on the second database;

comparing the ~~second~~ first information with information stored on the handheld device

that is indicative of a version of the application on the handheld device;

updating the application on the handheld device using metadata received from the server

if the ~~second~~ first information does not compare equally with the information that

is indicative of the version of the application on the handheld device;

sending, to the server, filter information;

receiving, from the server, data filtered based on the filter information;

determining whether the handheld device has sufficient unused memory to store the

filtered data.

22.   (Previously Presented) The machine-readable medium of claim 21, wherein the plurality of instructions further comprise instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

receiving, from the server, first information indicative of a structure of the first database;

determining whether the structure of the first database has been updated since a previous

synchronization operation.

23. (Previously Presented) The machine-readable medium of claim 22, wherein the instructions for performing the operation of determining whether the structure of the first database has been updated since the previous synchronization operation, include instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

comparing the first information with information stored on the handheld device that is indicative of the structure of the first database when the previous synchronization operation was performed.

24. (Previously Presented) The machine-readable medium of claim 22, wherein the instructions for performing the operation of receiving, from the server, the filtered data, include instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

receiving, from the server, a first set of data extracted from the first database when the structure of the first database has been updated since the previous synchronization operation, the first set of data including data that has not changed in the second database since the previous synchronization operation was performed.

25. (Previously Presented) The machine-readable medium of claim 22, wherein the instructions for performing the operation of receiving, from the server, the filtered data, include instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

receiving, from the server, a second set of data extracted from the first database when the structure of the first database has not been updated since the previous synchronization operation, the second set of data not including data that has not changed in the second database since the previous synchronization operation was performed.

26.   (Previously Presented) The machine-readable medium of claim 21, wherein the plurality of instructions further comprises instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

  determining whether the application has been updated since a previous synchronization operation.

27.   (Cancelled)

28.   (Previously Presented) The machine-readable medium of claim 21, wherein the instructions for performing the operation of sending, to the server, information of transactions performed on the second database, include instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

  receiving, from the server, an identifier of information of a last transaction received by the server; and

  sending, to the server, transaction information that includes an identifier for each transaction made after the last transaction received by the server.

29.   (Previously Presented) The machine-readable medium of claim 28, wherein the instructions for sending to the server information of transactions performed on the second database, include instructions that when executed by the handheld device cause the handheld device to perform operations comprising:

  receiving, from the server, error information when the server detects a transaction error;

  providing an indication of the error information to a user; and

  receiving input from the user to process the transaction error.

30.   (Cancelled)

31. (Previously Presented) A handheld device, comprising:

a local database;

a user interface coupled to the local database;

a transaction recorder coupled to the local database, wherein the transaction recorder is

configured to record information related to changes made to the local database by

a user of the handheld device via the user interface and to provide the recorded

information to a server during a synchronization operation;

a metadata importer coupled to the user interface, wherein the metadata importer is

configured to receive metadata from the server during the synchronization

operation, the metadata comprising information for updating the user interface;

a data importer coupled to the local database, wherein the data importer is configured to

receive data provided by the server during the synchronization operation, the data

being a subset of data extracted from a main database based on visibility rules and

filter information; and

a device configured to determine whether the handheld device has sufficient unused

memory to store the data provided by the server.

32. (Cancelled)

33. (Previously Presented) The handheld device of claim 31, wherein the data importer is
configured to determine whether a structure of the main database has been changed since a
previous synchronization operation.

34. (Previously Presented) The handheld device of claim 33, wherein the data importer is
configured to receive an identifier corresponding to the structure of the main database and
compare the received identifier with a stored identifier corresponding to the structure of the main
database when the previous synchronization operation was performed.

35. (Previously Presented) The handheld device of claim 33, wherein the data importer is configured to receive a first set of data extracted from the main database by the server when the structure of the main database has changed since the previous synchronization operation, the first set of data including data that has not changed in the local database since the previous synchronization operation was performed.

36. (Previously Presented) The handheld device of claim 33, wherein the data importer is configured to receive a second set of data extracted from the main database by the server when the structure of the main database has not changed since the previous synchronization operation, the second set of data omitting data that has not changed in the local database since the previous synchronization operation was performed.

37. (Previously Presented) The handheld device of claim 31, wherein the metadata importer is configured to determine whether the user interface has been updated since the previous synchronization operation.

38. (Previously Presented) The handheld device of claim 37, wherein the metadata importer is configured to receive version information of a most currently available user interface and to compare the received version information with version information corresponding to the user interface included in the handheld device.

39. (Previously Presented) The handheld device of claim 31, wherein the transaction recorder is configured to receive from the server an identifier of a last transaction recorded by the transaction for which transaction information was received by the server from the handheld device, and to send to the server transaction information that includes an identifier for each transaction made after the last transaction.

40. (Previously Presented) The handheld device of claim 39, wherein the transaction recorder is configured to receive from the server error information when the server detects a transaction error, to provide an indication of the error information to a user, and to receive input from the user to process the transaction error.

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41. – 60. (Cancelled)

61. (New) A method, comprising:

establishing a connection between a server and a synchronization client associated with a handheld device, the server having access to a first database and the handheld device having access to a second database, the handheld device comprising an application configured to allow user write access to the second database, wherein the synchronization client is configured to use the connection in an operation to synchronize the second database and the first database;

receiving, from the server, first information indicative of a version of the application;

sending, to the server, information of transactions performed on the second database;

comparing the first information with information stored on the handheld device that is indicative of a version of the application on the handheld device;

receiving metadata from the server;

determining whether the handheld device has sufficient unused memory to store the metadata;

updating the application on the handheld device using metadata received from the server if the first information does not compare equally with the information that is indicative of the version of the application on the handheld device and if it is determined that the handheld device has sufficient unused memory to store the metadata, wherein the metadata comprises application definitions;

receiving, from the server, data to update the second data base.

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